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P006-EN

Survey of clean intermittent catheterization practices: Responses for general practitioners

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Keywords: Neurological bladder; Clean intermittent catheterization; General practitioners

Introduction.— Clean intermittent catheterization (CIC) is the method of choice for micturation in patients with bladder retention. It has constituted a revolutionary advance in the management of bladder and sphincter disorders of spinal cord injury patients, a population where urinary complications were the leading cause of morbidity and mortality. Patients practicing CIC should be managed by a physician familiar with urinary disorders. Many of these patients are followed by a general practitioner (GP) because of their geographic residence.

Objective.— Evaluate the knowledge of future GPs concerning CIC.

Subjects and methods.— A direct questionnaire on CIC was distributed to 140 interns near the end of their curriculum. All were future GPs. The questionnaire included 13 items concerning the definition of CIC, the practical modalities, indications for bacteriology examinations and antibiotic therapy, and complications of this mode of mictition.

Results.— One third of the physicians gave an exact definition of CIC; 15% confused it with indwelling catheterization. Sterile gloves were required for CIC for 37.8% of the physicians and an antiseptic for 58%. Infection was considered to be the main complication of CIC for 47% of the physicians and 36% requested a bacteriology systematically for these patients; 31% would prescribe antibiotics in the event of colonization. Half of the physicians prescribed antibiotics for 10 days in the event of a lower urinary tract infection in CIC patients and one third prescribed 15 days.

Discussion and conclusion.— CIC is the gold standard for neurological bladder with indications that have broadened over the last decades. It is better known by GPs who follow these patients in their home. It would be important to elaborate a guide for GPs associated with patient education to improve the management practices for CIC patients.

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P007-EN

Voiding disorders in Biermer's anemia: Three case reports and a review of the literature

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Keywords: Biermer's anemia; Voiding disorders; Combined sclerosis of the spinal cord; Vitamin B12; Self-catheterization

lopathy, related to vitamin B12 deficiency. Voiding disorders are common neurological signs.

Methods.— Three hospitalized patients, aged 40–51 years, 2 female and 1 male, presented paraparesia or tetraparesia with sphincter disorders subsequent to combined sclerosis of the spinal cord in a context of Biermer's disease. All had clinical signs of overactive bladder, pollakiuria and urine leakage. Bladder ultrasound was normal in three patients and urodynamic studies were not performed. One of the patients left hospital without learning self-catheterization and three patients were taking anticholinergics and vitamin B12 supplementation.

Discussion and conclusion.— There are few reports in the literature on voiding disorders in combined sclerosis of the spinal cord secondary to Biermer's anemia. One study published by Misra et al. in 2008 reported eight patients with advanced stage disorders whose symptoms responded to vitamin B12 supplementation.

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P008-EN

Autonomous hyperreflexia and Devic' optic neuromyelitis: A logical but poorly recognized combination: a case report

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Introduction.— Optic neuromyelitis (ONM) described by Devic is a disease of the central nervous system characterized by myelitis and optic neuritis. The disease is distinct from multiple sclerosis (MS) due to a specific antibody, Ig-ONM.

Case report.— A patient born in 1956 developed ONM diagnosed in 1994. The clinical presentation associates paraplegia (AIS B) at Th6 and nearly total blindness. The patient can urinate spontaneously. The urodynamic tests show bladder-sphincter dyssynergia and significant post-miction residue. At post follow-up consultations, are noted erythematous face and high blood pressure; antihypertensive treatment was instituted. Later, due to the risk of autonomous hyperreflexia (AHR) associated with the poorly controlled bladder-sphincter function, the patient accepted learning self-catheterization. The blood pressure figures and the facial erythema were amended despite withdrawal of the antihypertensive treatment.

Discussion.— The spinal cord lesion in ONM may favour the development of autonomous hyperreflexia, corresponding to orthosympathetic discharges due to afferent destruction above Th7; most of these discharges arise from the perineum and, in our patient, from elevated bladder pressure. Episodes of hypertension are treated by management of the spinal irritation, in this case by pharmacological blockade of the bladder and clean intermittent self-catheterization. The rate of cardiovascular dysreflexia symptoms is about 20% in MS and could be greater in Devic's disease. An American study has nevertheless shown that 45% of MS specialists underestimate the development of dysreflexia phenomena. The clinical manifestations of ONM should thus suggest possible autonomous hyperreflexia whose cause must be discovered.

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P009-EN

Micturition disorders in children: Diagnostic approach and management

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Keywords: Micturition disorders; Children; Non-neurogenic bladder; Therapeutics

Purpose.– The purpose of this work was to describe the different types of micturition disorders observed in children and to examine the different phases of management.

Patients and methods.– This was a retrospective study of 32 children (28 girls, 4 boys) treated for micturition disorders from January 2005 to March 2011 in the urodynamic unit of the physical medicine and rehabilitation unit of the El Kassab National Orthopaedic Institute in Tunis. The clinical history and urodynamic results as well as the neuroradiographic findings and urodynamic study were recorded. Patients were followed at semestrial consultations.

Results.– Mean patient age was 7 years. Urinary infections were the most common clinical manifestation (84.37%). Bladder-ureteral reflex was observed in 40.6%. Early stage renal failure was observed in one patient. The urodynamic explorations revealed bladder-sphincter dyssynergia in 87.5%. Medical treatment was effective in 75%. For five children (15.6%), the clinical state improved and in three others (1.25%) conservative treatment failed. Duration of treatment in completely cured children was 12 to 36 months. Mean time to resolution of the symptoms was 2.6 years.

Discussion.– Functional micturition disorders are common in children, involving a poorly stabilised or non-neurogenic bladder. History taking, physical examination, radiography, and urodynamic explorations can eliminate the diagnosis of neurogenic bladder and orient the diagnosis and therapeutic management to micturition dysfunction. This disorder may have serious consequences for the upper urinary tract. In order to avoid these problems, early diagnosis and treatment is necessary. Conservative treatment (medication associated with biofeedback re-education) in children with micturitional disorders is effective when applied in an appropriate manner (particularly in children with detrusor instability). In certain situations, intermittent catheterization or even surgery may be required.

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P010–EN

Evaluation of bladder-sphincter disorders sclerodermia: 69 patients

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Keywords: Systemic sclerodermia; Bladder-sphincter disorders; Self-administered questionnaire

Introduction.– Sclerodermia is a rare chronic disease of the immune system. Bladder involvement is exceptional.

Patients and methods.– This study included 293 patients with sclerodermia constituting the cohort of the Internal Medicine Unit of the Cochin Hospital. In March 2010, a self-administered questionnaire was addressed to these patients. The variables recorded were: age, gender, duration of sclerodermia, bladder-sphincter disorders, presence of urinary infections.

Results.– In all, 131 (44%) of patients responded with 114 completed questionnaires. Five patients had died, the address was inaccurate for six, two patients decline participation in the study and one patient was hospitalized and could not complete the questionnaire. For the 114 patients included in the analysis, 69 (23.5% of the 293 initial questionnaires) were correctly identified. The other participants did not provide their name, initials or file number. Fifty-six (81.2%) were female. Mean age, in general at the time of evaluation, was 56 ± 14.4 years. Men were 2 years older than women. Mean duration of the disease the

day of the evaluation was 9.3 ± 7.7 years. Twenty-seven women (48.21%) presented exercise-induced incontinence, 48 (85.71%) had bladder overactivity, and 24 (women (42.85%) dysuria. Twenty-two women had a urinary tract infection (39.28%), including three with fever (5.35%) and 21 (37.5%) treated with antibiotics. Two men presented exercise-induced urinary incontinence (15.38%) and 12 men had an overactive bladder (92.30%). Dysuria was present in 7 men (53.38%). Two men had a urinary tract infection (15.38%), including one with fever (7.69%); both were treated with antibiotics.

Conclusion.– Urinary disorders are more common in patients with sclerodermia than in the general population. Urinary disorders are more common than bladder overactivity.

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P011–EN

Transcutaneous electric stimulation (TENS) for the treatment of neurogenic and idiopathic overactive bladder: 24 cases

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Objective.– Demonstrate the efficacy of TEN for the treatment of neurogenic and idiopathic overactive bladder (NOAB, IOAB).

Patients and methods.– Retrospective study of 24 patients with symptoms of overactive bladder who failed to respond to anticholinergic medication. The patients were divided into two groups by etiology: group 1 post-trauma NOAB; group 2: IOAB. All patients were treated with TENS at the level S3. An adapted protocol including one stimulation per hour for each session, three sessions per week for 12 weeks was instituted without use of anticholinergic agents. The patients were reviewed at treatment end then at 3 and 9 months. Urinary flow and micturition diary were used to assess outcome: volume, intermiction interval (diurne, nocturne), frequency of urinary leakage between self-catheterizations for IOAB.

Results.– Group 1 included 15 patients (1 f, 14 m), mean age 31 years (27–35 years). Most patients (6.66%) were totally continent with decreased miction frequency and increased miction volume at the end of the protocol. This result was sustained at 3 and 9 months. Only 3 patients had recurrent symptoms and were not satisfied with the protocol, requesting an alternative treatment.

Conclusion.– The early results of TENS in patients with idiopathic or neurogenic OAB are encouraging. This is a simple and effective non-invasive technique with low cost. Long-term outcome remains to be determined.

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P012–EN

Evaluation of sexuality in 53 paraplegic patients

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Introduction.– Sexual disorders are frequent in paraplegic patients. Few studies have evaluated the impact on quality of life.

Objectives.– Evaluate sexual disorders in these patients using validated scores and assessing impact on quality of life.

Patients and methods.– This retrospective study included 62 paraplegic patients treated from 2003 to 2009. Only 53 patients were retained for study (the others were lost to follow-up or declined participation): 71% of patients were male and 29% female; the sex ratio was 2.4 and the mean age 45.3 years. Etiologies were trauma (51%), tumor (21.5%), operated discal hernia (27.5%). Spinal cord injury (thoracic and upper lumbar) were noted in 55%, equine cauda disorders in 45%; 20.5% of patients could walk, 29.5% with